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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,648	12/13/2000	Chakravarthy Kosaraju	042390.P10139	2276

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EXAMINER

VU, TRISHA U

ART UNIT	PAPER NUMBER
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2112

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DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,648

Applicant(s)

KOSARAJU, CHAKRAVARTHY

Examiner

Trisha U. Vu

Art Unit

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-15 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimilli et al. (6,535,939) (hereinafter Arimilli) in view of Bell (5,828,865).

As to claim 11, Arimilli teaches a method comprising: communicating between a processor (processor chip 201) and a device (device 202c) through a point to point bus (Fig. 1B); using a signal pathway internal to the processor during the communications between the processor and the device; and changing the signal pathway within the processor to optimize a connection for an application (by the switch logic) wherein the processor comprises two or more ports (col. 10, lines 37-67 and col. 11, lines 1-11).

However, Arimilli does not explicitly disclose linking input signals from the two or more ports to combine into a single input signal from the device depending on the application configured by a user. Bell teaches linking input signals from two ports to combine into a single input signal from depending on the application configured by a user (linking two 32-bit buses to combine into a 64-bit bus) (Fig. 5 and col. 6, lines 20-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

include linking input signals from two ports to combine into a single input signal from depending on the application configured by a user as taught by Bell in the system of Arimilli to achieve improved interconnection flexibility and bandwidth (col. 3, lines 1-9).

As to claim 12, Arimilli further teaches to optimize a connection comprises altering the bandwidth between a first processor and a device exterior to the first processor (col. 11, lines 1-11).

As to claim 13, Arimilli further teaches to optimize a connection comprises altering a number of processors connected to the device (col. 9, lines 36-46).

As to claim 14, Arimilli further teaches the application is selected from a group consisting of a work station application, a server application, a two processor platform, a four processor platform, or an eight processor platform (to serve variety number of external devices, processors, and/or network) (col. 5, lines 12-26, 55-67, and col. 11, lines 49-52).

As to claim 15, Arimilli further teaches the changing of the signal pathway consists of changing a setting in a configuration register (register(s) that hold the setting of the buses) to direct an arbiter to send a control signal to one or more signal pathway switching devices located in the processor (col. 7, lines 2-10, lines 56-64, and col. 8, lines 25-28).

Response to Arguments

Applicant's arguments regarding the newly added limitations "the processor contains an arbiter connected to the multiplexer to direct the multiplexer to route signals from the N-bit

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registers or from the XN-bit register depending upon the platform to be serviced” (claim 1, page 7 of the Remarks), and “the arbiter directs the multiplexer whether to route signals from the first bit register as well as from the second bit register” (claim 4, page 8 of the Remarks), have been fully considered and are persuasive. The rejections of claims 1–10 have been withdrawn.

Applicant’s arguments regarding the newly added limitation “linking input signal from two or more ports of the processor to combine into a single input signal form the device depending on the application configured by a user” (claim 11, page 8-9 of the Remarks) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art reference(s) as addressed in the rejection above.

Allowable Subject Matter

3. Claims 1-10 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 includes the limitation of an arbiter connected to the multiplexer to direct the multiplexer to route signals from the N-bit registers or a signal from the XN-bit register depending upon the platform to be serviced, which is not shown by the prior art of record, in the combination as disclosed and claimed.

Claim 4 includes the limitation of the arbiter directs the multiplexer to route signals form the first bit register as well as from the second bit register, which is not shown by the prior art of record, in the combination as disclosed and claimed.

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The examiner interpreted the claims in light of the specification and in view of Applicant's persuasive arguments that the processor contains an arbiter connected to the multiplexer to direct the multiplexer to route signals from the N-bit registers or from the XN-bit register depending upon the platform to be serviced (page 7 of the Remarks), and the arbiter directs the multiplexer whether to route signals from the first bit register as well as from the second bit register (page 8 of the Remarks).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, as the art discloses buses which operate independently or in combined mode:

US Patent	6,148,356	Archer et al.
US Patent	6,061,510	Klein et al.
US Patent	6,675,248	Olarig et al.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trisha U. Vu whose telephone number is 703-305-5959. The examiner can normally be reached on Mon-Thur and alternate Fri from 7:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Trisha U. Vu
Examiner
Art Unit 2112

uv


SUMATI LEFKOWITZ
PRIMARY EXAMINER